CORRECTED VERSION

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 3 May 2001 (03.05.2001)

PCT -

(10) International Publication Number WO 01/31578 A1

- (51) International Patent Classification7: G06M 1/04, 1/08
- (21) International Application Number: PCT/GB00/04045
- (22) International Filing Date: 20 October 2000 (20.10.2000)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

9924949.2

22 October 1999 (22.10.1999) GF

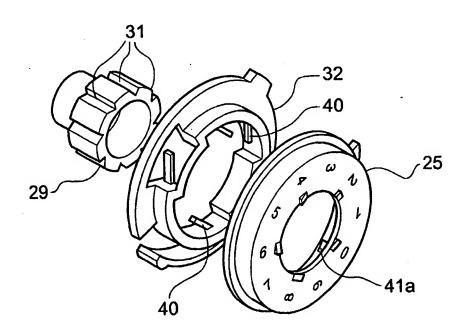
- (71) Applicant (for all designated States except US): INNO-VATA BIOMED LIMITED [GB/GB]; The Ziggurat, 25 Grosvenor Road, St. Albans AL1 3HW (GB).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): BRAITHWAITE,

Philip [GB/GB]; ML Laboratories Plc, 13 Alexandra Way, Ashchurch Industrial Estate, Tewkesbury GL20 8NB (GB),

- (74) Agent: HARRISON GODDARD FOOTE; Tower House, Merrion Way, Leeds LS2 8PA (GB).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: MECHANICAL DOSES COUNTER IN A POWDER INHALER



(57) Abstract: There is described a counter mechanism which comprises a rotatable ratchet adapted to act on a drive gear, the ratchet also acting on a counter wheel, characterised in that the rotation of the counter wheel is less than the rotation of the drive gear. There is also described a medicament delivery device, e.g. an inhaler comprising the counter mechanism of the invention and also a method of treatment using the delivery device.

01/31578 A1



Published:

with international search report

(48) Date of publication of this corrected version:

13 September 2001

(15) Information about Correction: see PCT Gazette No. 37/2001 of 13 September 2001, Section II For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.